### **ENGINEER TRAINEE**

### **Nature of Work**

Under supervision of a licensed profession engineer, performs work on a variety of engineering services or creative works, the adequate performance of which requires engineering education, training and experience in the application of special knowledge of the mathematical, physical and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning and design of engineering works and systems; planning the use of land and water, teaching of advanced engineering subjects, engineering surveys and studies; review of construction projects for the purpose of assuring compliance with drawings and specifications any of which embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects and industrial or consumer products or equipment of a mechanical, electrical, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health or property, and including such other professional services as may be necessary to the planning, progress and completion of any engineering services.

# **Distinguishing Characteristics**

Under supervision of a licensed professional engineer may apply engineering techniques, procedures, and criteria within rules, regulations and operating procedures of the specialty area of assignment. May specialize in a particular area of emphasis withing the area of assignment.

### **Examples of Work**

Reviews data analysis to determine accuracy in establishing standards/limits. Performs engineering calculations, studies, plans, reports, and data analysis all under the

supervision of a license engineer to determine (establish) performance standards/limits. Assist in the coordinating of construction projects.

- Assist in conducting interim and final inspections of construction projects to determine compliance with applicable laws, regulations, and specifications.
- Assist in performing project analyses of plans and/or contracts for projections; recommendations of alternative construction methods.
- Assist in writing reports detailing recommendations, conclusions, and findings from inspections and reviews. Reads professional journals, and trade publications to gain knowledge of new technologies.

Attends state and national meetings and seminars to improve and share engineering knowledge.

### Knowledge, Skills and Abilities

Knowledge of agency policies and practices pertaining to agency jurisdiction.

Knowledge of equipment and instruments used in various types of engineering.

Knowledge of fundamentals of various types of engineering.

Ability to communicate effectively, both orally and in writing.

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# **ENGINEER TRAINEE - Cont'd.**

# **Minimum Qualifications**

Training: Current license as an engineer-in-training.

# Areas of Assignment:

Agricultural Engineering Architectural Engineering Chemical Engineering Civil Engineering Electrical Engineering Environmental Engineering Geologic Engineering Industrial Engineering Mechanical Engineering Mining Engineering Petroleum Engineering Public Health Engineering Photogrammetric Engineering Sanitary Engineering Structural Engineering

Established: 03/20/2008 Effective: 05/01/2008